

REMARKS

Applicants amend claims 1 and 16. Claims 1-26 are currently pending, of which claims 1, 12 and 16 are independent. No new matter has been added. Applicants respectfully request reconsideration of the outstanding rejections and passage of the claims to allowance.

I. Rejection of Claims 1-8, 11-23 and 26 under 35 U.S.C. § 103(a)

Claims 1-8, 11-23 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over “Real-Time Workshop® User’s Guide,” January 1999 (hereafter “RTW_UG”) in view of U.S. Patent Publication Number 2003/0056195 to Hunt (hereafter “Hunt”) (Office Action mailed June 9, 2008, paragraph 6). Applicants respectfully traverse the 35 U.S.C. § 103(a) rejection of claims 1-8, 11-23 and 26 as set forth below.

A. Claim 1

Independent claim 1 recites:

“In an electronic device having a graphical modeling and execution environment, said graphical modeling and execution environment including at least one graphical model, a method comprising the steps of:
 providing an automatic code generator to create source code that implements functionality of said at least one graphical model and that corresponds to data referenced by said at least one graphical model;
 specifying a first manner in which said automatic code generator creates said source code;
 providing a user interface with a plurality of selectable parameters;
and
 creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters, said custom storage class specifying a second manner in which said automatic code generator creates source code corresponding to said data referenced by said at least one graphical model in said graphical modeling and execution environment, said second manner differing from said first manner.”

Applicants respectfully submit that RTW_UG and Hunt, alone or in any reasonable combination, fail to disclose or suggest at least the following feature of independent claim 1:

“creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters.”

RTW_UG is a user guide for Real-Time Workshop® which produces code from Simulink® models and automatically builds programs that can be run in a variety of real-time and stand-alone environments (RTW_UG, page 1-2). Real-Time Workshop® allows automatic program building which provides a standard means for creating programs for real-time applications (RTW_UG, page 3-2). The Examiner correctly pointed out that RTW_UG does not disclose or suggest “creating said custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters,” as recited in claim 1 (Office Action mailed June 9, 2008, paragraph 6).

The Examiner alleged that Hunt discloses the above feature of claim 1 that is missing from RTW_UG. Applicants disagree with the Examiner since the disclosure of Hunt does not cure the shortcomings of RTW_UG with respect to the features of claim 1.

The Examiner pointed to Hunt as disclosing or suggest the above feature of claim 1 (Office Action mailed June 9, 2008, paragraph 6):

“Hunt discloses:

- providing a user interface with a plurality of selectable parameters for a custom storage class, said custom storage class specifying a second manner in which said automatic code generator creates source code corresponding to said data referenced by said at least one graphical model in said graphical modeling and execution environment, said second manner differing from said first manner (see Figure 2; Paragraph [0049], “The code generator tool of the preferred embodiment of the present invention is embodied as an application program that presents the user with a Graphical User interface (GUI) that can be used to easily input meta data about an object model.”; Paragraph [0050], “Turning now to FIG. 1, by way of an overview, the user of the code generator 100... of the present invention enters meta-data 102 into the code generator 100’s GUI.”; Paragraph [0083], “Consider now the entry of the meta data used in connection with the present invention. Such information representing the meta data is input via the GUI such as illustrated in FIGS. 2-6.”); and
- creating said custom storage class in said graphical modeling and execution environment utilizing parameters selected

by a user from said plurality of selectable parameters (*see Paragraph [0088], “When the user is ready to build the class, the “Generate” button 218 can be selected, for example by clicking with a mouse.”*)” [emphasis added]

The Examiner’s reliance on Hunt is misplaced. The cited sections of Hunt do not disclose or suggest “creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters,” as recited in claim 1, because Hunt does not disclose or suggest creating a custom storage class using parameters selected by a user from a plurality of selectable parameters.

Hunt at paragraph [0088], cited by the Examiner, discusses a graphical user interface for generating code for (i.e. building) an already-existing class. In order to generate code for a class, a user first specifies settings for the code generation operation, e.g. whether to generate code for “Get” and “Set” functions. After specifying the settings, the user presses the “Generate” button 218 to generate code for the class.

In Hunt, a class is first created, and then a user is allowed to generate code for the class by specifying settings. That is, the class for which code is generated already exists before the user starts the code generation process outlined in paragraph [0088]. The settings specified by the user in the code generation process are not used to create the class, but merely directs the code generation.

In contrast, claim 1 requires creating a custom storage class by utilizing parameters selected by a user from a plurality of selectable parameters. Hunt merely discusses **generating code for a class** by using settings specified by a user in the code generation process. However, Hunt does not disclose or suggest **creating a class** by utilizing any such parameters selected by a user, as required by claim 1.

As such, Applicants respectfully submit that RTW_UG and Hunt, alone or in any reasonable combination, do not support a 35 U.S.C. § 103(a) rejection of claim 1. Accordingly, Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection of claim 1.

B. Claims 2-8 and 11

Claims 2-8 and 11 depend from independent claim 1 and, as such, incorporate all of the elements of claim 1. Accordingly, claims 2-8 and 11 are allowable for at least the reasons set forth above with respect to claim 1. Applicants therefore respectfully request reconsideration and allowance of claims 2-8 and 11.

C. Claim 12

Independent claim 12 recites:

“An electronic device having a modeling and execution environment with at least one graphical model, said electronic device comprising:
a processor for:
 executing an automatic code generator to create source code that implements functionality of said at least one graphical model and that corresponds to data referenced by said at least one graphical model;
 specifying a first manner in which said automatic code generator creates said source code; and
 creating a custom storage class in said modeling and execution environment, said custom storage class created utilizing parameters selected by a user from a plurality of selectable parameters; and
a display device for:
 displaying a user interface with said plurality of selectable parameters for said custom storage class, said custom storage class specifying a second manner in which said automatic code generator creates source code corresponding to said data referenced by said at least one graphical model, said second manner differing from said first manner; and
 displaying a view of salient aspects of said source code generated by said automatic code generator utilizing said user-selected parameters.”

Applicants respectfully submit that RTW_UG and Hunt, alone or in any reasonable combination, fail to disclose or suggest at least the following feature of independent claim 12:
“creating a custom storage class in said modeling and execution environment, said custom

storage class created utilizing parameters selected by a user from a plurality of selectable parameters.” A combination of RTW_UG and Hunt does not disclose or suggest creating a custom storage class utilizing parameters selected by a user from a plurality of selectable parameters. As such, RTW_UG and Hunt, alone or in any reasonable combination, do not support a valid 35 U.S.C. § 103(a) rejection of claim 12. Accordingly, Applicants respectfully request reconsideration and allowance of claim 12.

D. Claims 13-15

Claims 13-15 depend from independent claim 12 and, as such, incorporate all of the elements of claim 12. Accordingly, claims 13-15 are allowable for at least the reasons set forth above with respect to claim 12. Applicants therefore respectfully request reconsideration and allowance of claims 13-15.

E. Claim 16

Independent claim 16 recites:

“A computer-readable medium for use in an electronic device having a graphical modeling and execution environment, said graphical modeling and execution environment including at least one graphical model, said computer-readable medium storing computer-executable instructions for:

- providing an automatic code generator to create source code that implements functionality of said at least one graphical model and that corresponds to data referenced by said at least one graphical model;
- specifying a first manner in which said automatic code generator creates said source code;
- providing a user interface with a plurality of selectable parameters;

and

- creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters, said custom storage class specifying a second manner in which said automatic code generator creates source code corresponding to said data referenced by said at least one graphical model in said graphical modeling and execution environment, said second manner differing from said first manner.”

Applicants respectfully submit that RTW_UG and Hunt, alone or in any reasonable combination, fail to disclose or suggest at least the following feature of independent claim 16: “creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters.” A combination of RTW_UG and Hunt does not disclose or suggest creating a custom storage class utilizing parameters selected by a user from a plurality of selectable parameters. As such, RTW_UG and Hunt, alone or in any reasonable combination, do not support a valid 35 U.S.C. § 103(a) rejection of claim 16. Accordingly, Applicants respectfully request reconsideration and allowance of claim 16.

F. Claims 17-23 and 26

Claims 17-23 and 26 depend from independent claim 16 and, as such, incorporate all of the elements of claim 16. Accordingly, 17-23 and 26 are allowable for at least the reasons set forth above with respect to claim 16. Applicants therefore respectfully request reconsideration and allowance of claims 17-23 and 26.

II. Rejection of Claims 9, 10, 24 and 25 under 35 U.S.C. § 103(a)

Claims 9, 10, 24 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over RTW_UG in view of Hunt as applied to claims 1 and 16, and further in view of U.S. Patent Publication Number 2003/0225774 to Davidov (hereafter “Davidov”) (Office Action mailed June 9, 2008, paragraph 7). Applicants respectfully traverse the 35 U.S.C. § 103(a) rejection of claims 9, 10, 24 and 25 as set forth below.

RTW_UG, Hunt and Davidov, alone or in any reasonable combination, fail to disclose or suggest each and every feature of claims 9, 10, 24 and 25.

RTW_UG and Hunt have been summarized above.

RTW_UG and Hunt, alone or in any reasonable combination, fail to disclose or suggest each and every feature of independent claim 1 from which claims 9 and 10 depend, and independent claim 16 from which claims 24 and 25 depend. The teachings of Davidov do not

supplement RTW_UG and Hunt in such a way as to cure the shortcomings of RTW_UG with respect to the features of independent claims 1 and 16.

Davidov relates to an infrastructure for creating applications for mobile information devices, using a tag-based markup language (Davidov, paragraph [0013]).

Regarding independent claim 1 from which claims 9 and 10 depend, Davidov does not disclose or suggest “creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters,” as recited in claim 1. As such, a combination of RTW_UG, Hunt and Davidov fails to disclose or suggest each and every feature of claims 9 and 10 which depend from claim 1.

Regarding independent claim 16 from which claims 24 and 25 depend, Davidov does not disclose or suggest “creating a custom storage class in said graphical modeling and execution environment utilizing parameters selected by a user from said plurality of selectable parameters,” as recited in claim 16. As such, a combination of RTW_UG, Hunt and Davidov fails to disclose or suggest each and every feature of claims 24 and 25 which depend from claim 16.

As such, RTW_UG, Hunt and Davidov, alone or in any reasonable combination, do not support a valid 35 U.S.C. § 103(a) rejection of claims 9, 10, 24 and 25. Accordingly, Applicants respectfully request reconsideration and allowance of claims 9, 10, 24 and 25.

CONCLUSION

In view of the foregoing amendments and arguments, Applicants believe that all claims should be passed to issuance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-062RCE2. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. §1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: November 10, 2008

Respectfully submitted,

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